IPMIView for Android

User's Guide

Revision 1.1.0

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Manual Revision 1.1.0

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1.Overview

IPMIView (IPMI-Over-LAN) is a management software program based on IPMI specification revision 1.5 - 2.0. IPMIView sends IPMI messages to and from the BMC (Baseboard Management Controller) on a host system at a remote location. IPMI messages are encapsulated in RMCP (Remote Management Control Protocol) packets called “datagrams”. This method is also referred to as “IPMI-over-LAN”.

According to the Distributed Management Task Force (DMTF) specification, RMCP is used for system management in a pre-OS or an OS-absent environment. RMCP is a simple request-response protocol that can be delivered using UDP (User Datagram Protocol) datagrams. IPMI-over-LAN uses version 1 of the RMCP protocol and packet format. An RMCP packet is transmitted via an IP (Internet Protocol) network, which allows system managers to manage their IPMI-enabled systems over the Internet. In a private LAN network, this is a basic feature. IPMI uses the same UDP port number (623 in decimal) as the ASF (Alert Standard Forum) protocol. If the managed system is protected by a firewall, UDP port 623 must be opened.

Now the Android app of this program has been developed to expand its use. With IPMIView for Android and a wireless connection, users can manage BMCs via their mobile devices with ease.

In addition, this app also provides you with a console to remotely and directly monitor and control your Supermicro servers.

2.Installation

2.1 Requirements

Make sure your device meets these requirements before installation.

- Android version 4.1.2 or higher
- Supported device resolution: hdpi, tvdpi and xdpi
- Supported English

2.2 Limitation

KVM only supports BMCs with an ATEN solution.

2.3 Installation

To install IPMIView on your mobile device, follow these steps:

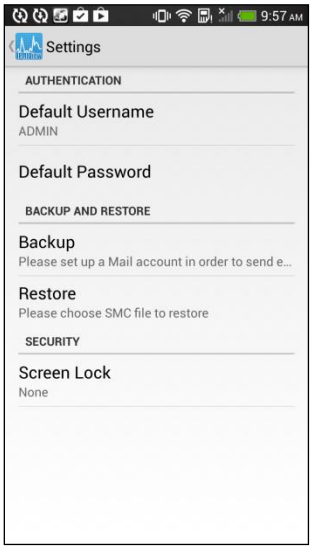
1. Search for “IPMIView” in the Google Play store.
2. Download and install the “IPMIView” application on your Android mobile device.

3.Grouping BMCs

3.1 Basic Setup

Before use, enter the username and password set up in your IPMIView at the control site.

1. Tap the IPMIView app icon on the screen page.
2. Tap the Menu button on the device or the icon in the action bar.
3. Select Settings. This screen page appears.



4. Tap Default Username and enter the username.
5. Tap Default Password and enter the password.

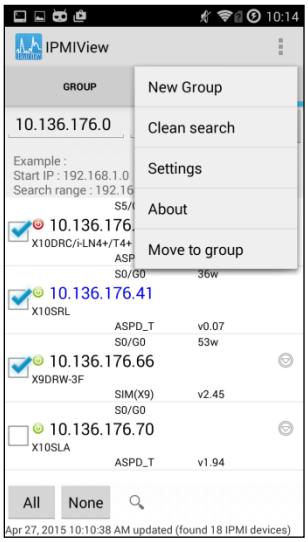
3.2 Creating a Group

1. Tap the function tab GROUP, and tap the Menu button on the device or the icon in the action bar.
2. Select New Group, and enter a name for this group.

3.3 Searching for BMCs

To search for BMCs, follow these steps:

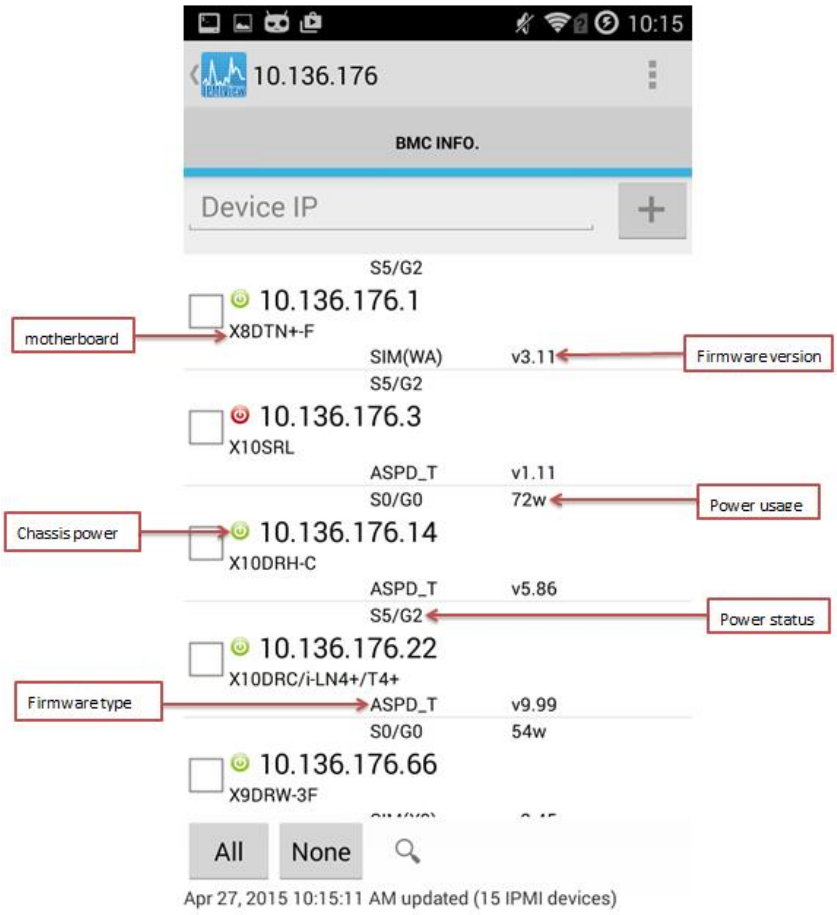
1. Tap the function tab **SEARCH**, enter the desired IP range in the field or leave it blank for automatic seach, and then tap the icon .
2. Select the desired BMCs to be collected in the same group, tap the **Menu** button on the device or the icon in the action bar, and select **Move to group** or select **New Group.**



3. Assign the selected BMCs to the desired group.
4. Tap the icon in the action bar and select Clean search.
5. Search can cross network segment but limit the amount of BMC devices to 1024
6. BMCs shown in blue have not been not added to any groups yet, and those shown in black have already been added. To view the groups the desired BMC belongs to, tap the icon of the desired BMC.

3.4Group Overview

Tap the desired group for an overview of the BMCs in this group.

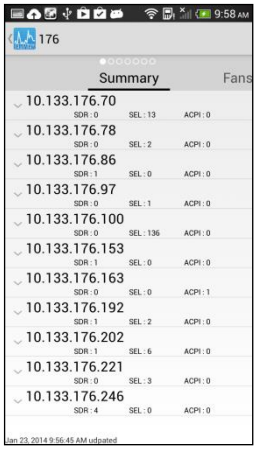


3.5 Diagnosing a Group

To view the status of each BMC in the group, follow these steps:

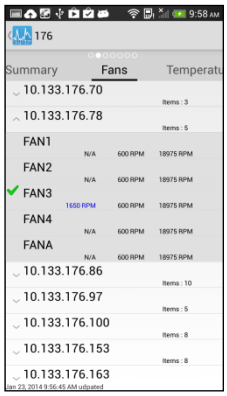
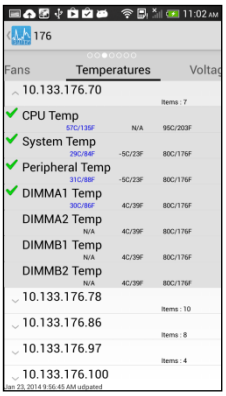
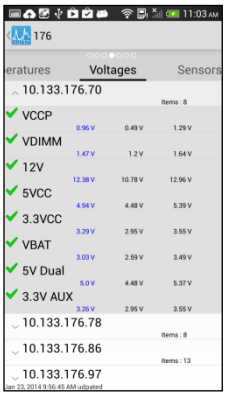
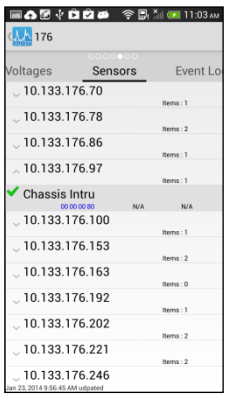
1. Tap the **GROUP** tab, select the desired group, and then tap the icon .

2. A diagnostic report is generated.



The report includes the following information: Summary, Fans, Temperatures, Voltages, Sensors, Event Log and ACPI. Scroll each tab for details.

3. Click on each sub item to enter the desired BMC function view.

Summary	**Fans**	**Temperatures**	**Voltages**
			
Sensors	**Event Log**	**ACPI**	
			

3.6 Manually Sorting the List

To sort the BMCs on the group list, follow these steps:

1. Tap the **Menu** button on the device or the icon in the action bar, and select **Manually Sort.**
2. Select the desired BMC to be moved around, and then drag and drop the icon next to it.
3. Tap the option **Done** in the upper right to save the change.

3.7 Customizing Sorting the List

To sort the BMCs on the group list in a customized manner, follow these steps:

1. Tap the **Menu** button on the device or the icon in the action bar, and select **Customize Sort.**
2. Select one type (IP, Alias, ACPI, Watts, MB model, Firmware type, Firmware version) of sorting.
3. Tap **Ascending** or **Descending** to finish.

3.8 Changing Names of IP Addresses

To modify the name or IP address of a BMC, long press the desired BMC on the screen and enter the new information.

3.9 Adding a BMC to Another Group

To add a BMC to one or more groups, tap the **Menu** button on the device or the icon in the action bar, and then select **Copy to group**.

3.10 Deleting a BMC from a Group

To delete a BMC from a group, tap the **Menu** button on the device or the icon in the action bar, and then select **Delete IPMI device**.

3.11 Filtering for Specific BMCs

To locate specific BMCs, tap the icon , and then enter the keywords in the Filter device field.

3.12 Copy selected BMCs to another group

To copy BMC(s) to another group, check the BMCs and tap the **Menu** button on the device or the icon in the action bar, and then select **Copy to group**.

3.13 Move selected BMCs to another group

To move BMC(s) to another group, check the BMCs and tap the **Menu** button on the device or the icon in the action bar, and then select **Move to group**.

3.14 Power management for Specific BMCs

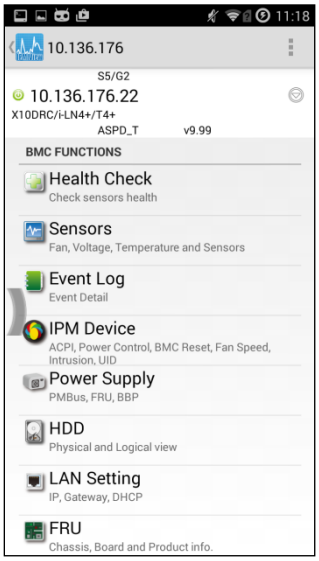
To power control BMC(s), check the BMCs and tap the **Menu** button on the device or the icon in the action bar, and then select **Power Control**.

3.15 Group Settings

Set group username and password by tapping the **Menu** button on the device or the icon in the action bar, and then select **Settings**.

4. Managing a BMC

To view the details of a BMC, tap the desired group then tap the IP address of the desired BMC. This page screen appears.



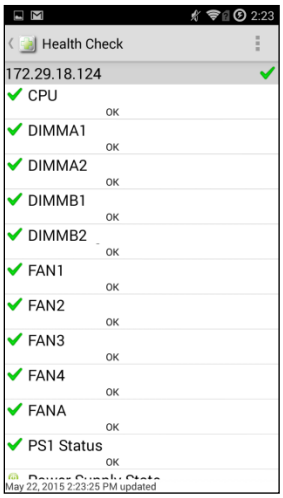
Scroll down to find more about the types of BMC functions listed. Tap any desired function to further manage the BMCs.

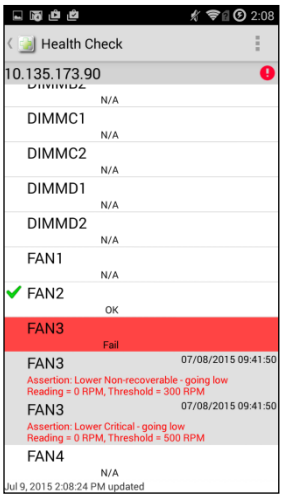
- Health Check
- Sensors
- Event Log
- IPM Device
- Power Supply
- HDD
- LAN Setting
- FRU
- Raw Command
- User
- KVM
- Multi-Node
- Preference
- Summary

4.1 Health Check

This option displays the status of each sensor health. Tap the menu icon ⋮ and select **Health check data** to set other date range for filtering status and SEL from the latest search.

Click on item if it is fail state, and check the detail from sub items.





Sensor status:

- OK
- Fail
- Unknown
- N/A
- Fail(N/A) : BMC thought the sensor exist, but it is missing in real life.

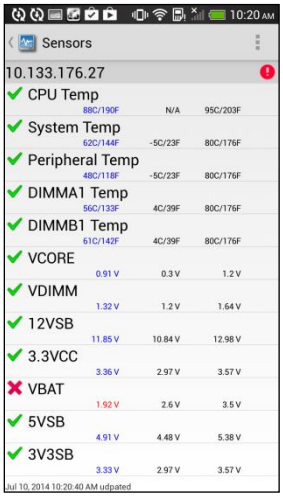
Power Status:

- ON
- OFF
- Unknown

Note: Retrieve newest SEL and SDR with **Refresh** or re-enter function again (data range from now to 5 hours ago).

4.2 Sensors

This option displays the status of each sensor used to monitor system health.



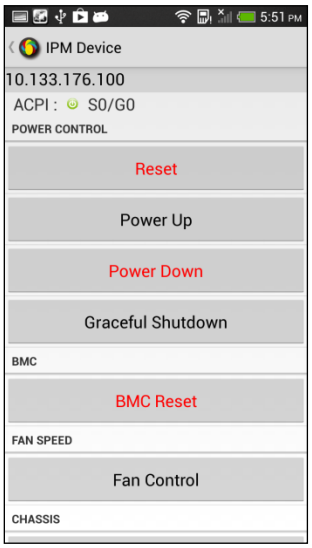
4.3 Event Log

This function allows you to access the system event log.

10:21 AM
Event Log
10.133.176.50
OS Boot 05/18/2014 22:40:23
Assertion: OS Boot
Event = C: boot completed
Platform Alert 05/19/2014 12:32:49
CPU Temp
De-assertion: Upper Non-recoverable - going high
Platform Alert 05/19/2014 12:32:54
CPU Temp
De-assertion: Upper Non-recoverable - going high
Platform Alert 05/19/2014 12:32:59
CPU Temp
De-assertion: Upper Non-recoverable - going high
Platform Alert 05/19/2014 12:33:05
CPU Temp
De-assertion: Upper Non-recoverable - going high
Platform Alert 05/19/2014 12:33:10
CPU Temp
De-assertion: Upper Non-recoverable - going high
Platform Alert 05/19/2014 12:33:15
CPU Temp
De-assertion: Upper Non-recoverable - going high
Session Audit 05/19/2014 13:32:18
Assertion: Session Audit
Event = Invalid Username or Password
Session Audit 05/19/2014 13:32:18
Total Entries : 512 Free Space : 0 bytes

4.4 IPM Device

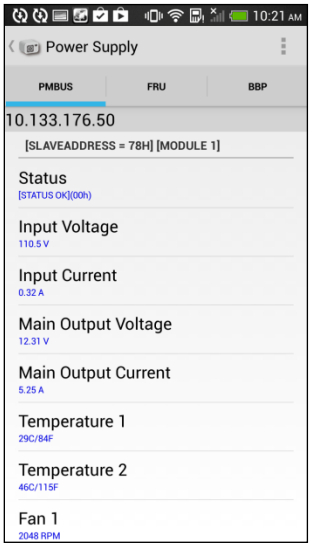
This option is used to display the information and functionality of the BMC firmware installed in the system.



- **Reset:** Resets the server.
- **Power up:** Turns on the server.
- **Power Down:** Turns off the server.
- **Graceful Shutdown:** Shuts down the server with software.
- **BMC Reset:** Resets the BMC.
- **Fan Control:** Sets the fan speed on the server.
- **Clear Chassis Intrusion:** Clears the chassis intrusion record.
- **Blinking on/off:** Sets the server blinking on/off.
- **Web View:** Opens a browser view of BMC management.

4.4 Power Supply

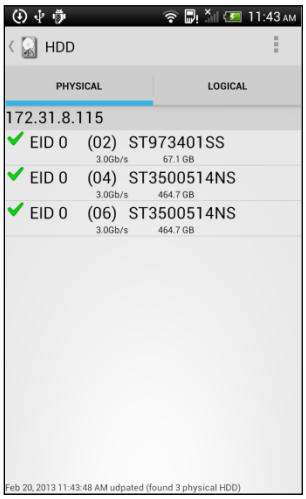
This option is used to display the power supply information in the system.



- **PMBus**: Displays the PMBus information of the power supply.
- **FRU**: Displays the FRU information of the power supply.
- **BBP** (Battery Backup Power): Select **Set the battery discharge setting** to configure how a battery is discharged or **View the current battery status** for information on the battery in use.

4.5 HDD

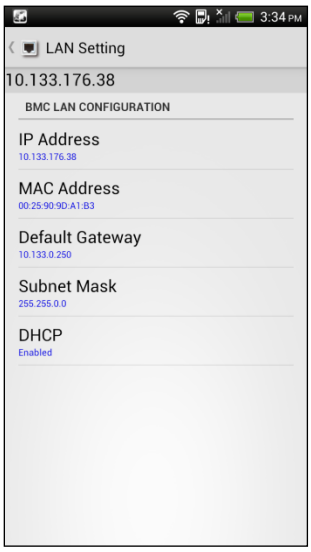
This option provides the information on two types of disk drives in the system. Tap the tab **PHYSICAL** or **LOGICAL** for details.



Note: This option is only available when the accessed server has LSI MegaRAID 2108 or 2208 installed.

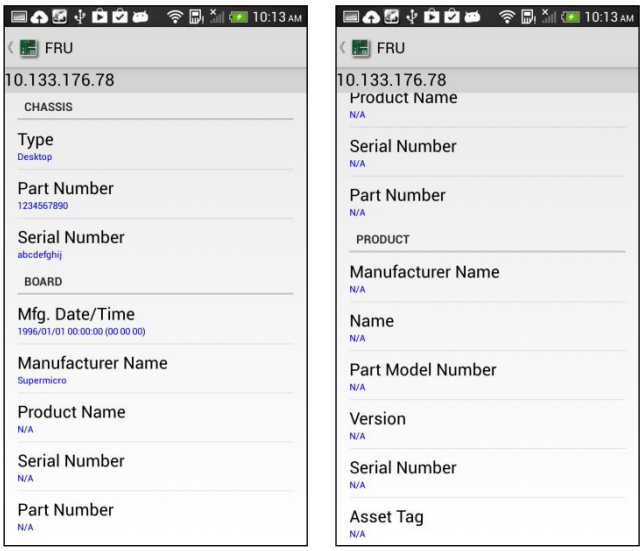
4.6 LAN Setting

This option displays the network settings.



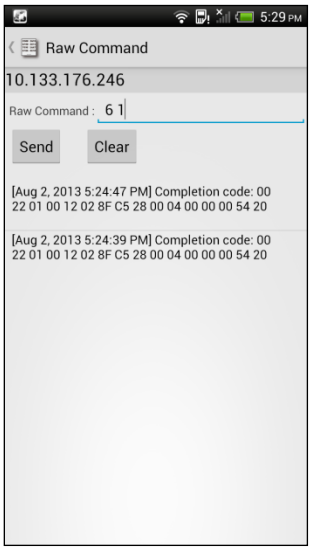
4.7 FRU

This option provides information on FRUs, including the serial number, part number, and the components of the motherboard.



4.8 Raw Command

This option allows for the execution of raw IPMI commands.



4.9 User

This option is used to access or edit the user information.

- To add or modify the user information, tap the desired item.
- To clear the user information, long press the desired item.
- Note that the user “ADMIN” cannot be deleted.

4.10 KVM

This option allows the user (Administrator required) to perform console redirection via KVM (Keyboard/Video/Mouse) support.

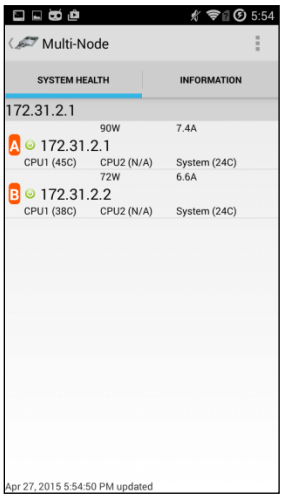
To control the cursor, use these multi-touch gestures:

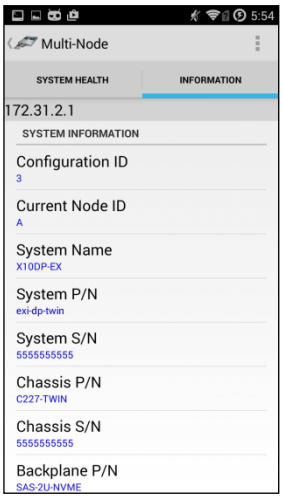
- Moving the mouse: Drag the screen and move.
- Double-clicking the left mouse button: Double-tap the screen.
- Clicking the left mouse button: Tap the screen once.
- Clicking the right mouse button: Long press the screen.
- Using the mouse wheel: Use two fingers to scroll up or down.
- Using the mouse to draw a selection rectangle or drag a window: Double-tap the screen or the desired window and drag.

For details on the use of virtual keyboard, see *5. Using the KVM Keyboard.*

4.11 Multi-Node

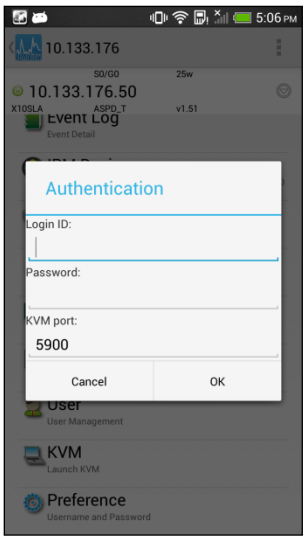
This option displays the status of multi-node system health. Tap the tab **INFORMATION** for detail information.





4.12 Preference

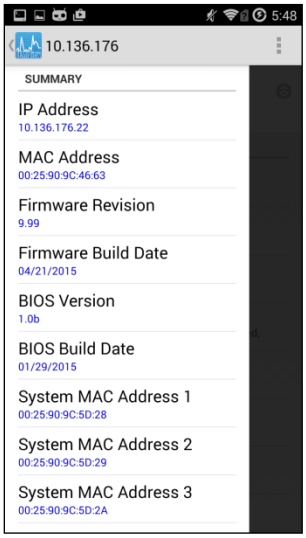
This option allows the user to specify the login ID and password of the desired BMC.



If any information has been modified, tap the **Menu** button on the device or the icon ⋮ in the action bar, and then select **Refresh** to update.

4.13 Summary

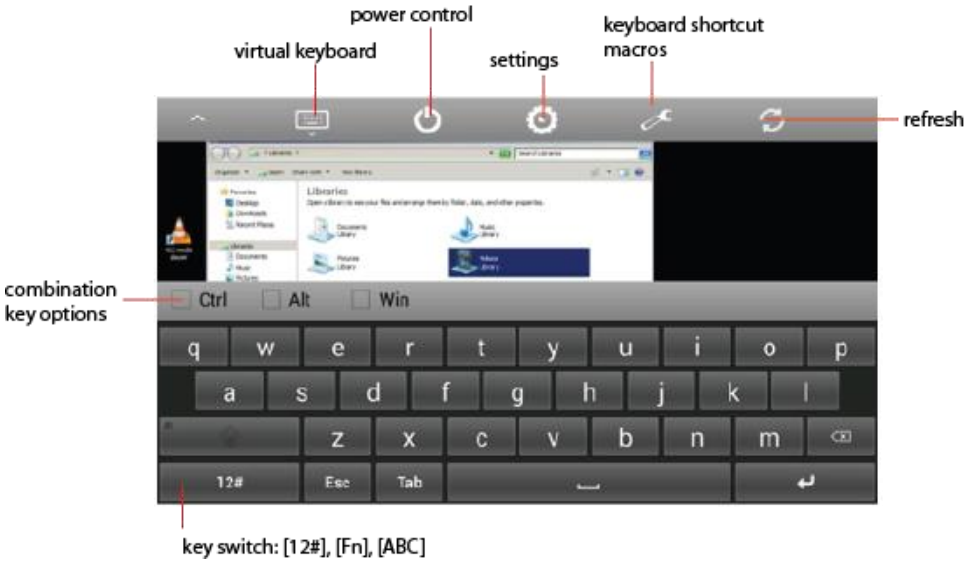
Slide the screen from left to right to show BMC summary.



5. Using the KVM Keyboard

A virtual keyboard on the screen is provided when you access the KVM console. To call up the virtual keyboard, tap the icon on the menu bar.

5.1 Overview of Virtual Keyboard



- The options [Ctrl], [Alt] and [Win] above on the virtual keyboard act as combination keys.
- The key is used to switch between caps and symbol keypads.
- The keys [12#], [Fn] and [ABC] are combined into one key. Tap the key to switch between different keyboards for input options.

6. Backup and Restoration

6.1 Backup

To backup the IPMIView settings for Android, follow these steps:

1. Tap the **Menu** button on the device or the icon ⋮ in the action bar, select **Settings**, and then select **Backup**.
2. The data is stored in .smc format. Two storage options are provided:
   - E-Mail: The backup file is sent to the designated e-mail address.
   - External storage: The backup file is automatically saved in an SD card installed in the device.

6.2 Restoration

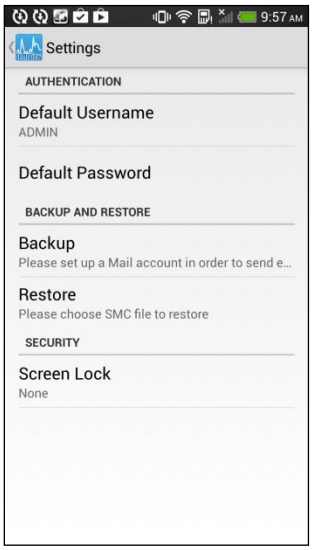
To restore the previous settings with the backup file, follow these steps:

1. Tap the **Menu** button on the device or the icon ⋮ in the action bar, select **Settings**, and then select **Restore**.
2. The SD card page screen appears. Scroll down to locate and open the Supermicro folder.
3. Tap the backup data file to start restoration.

7. Security Lock Screen

7.1 Lock screen

If you want your application secure, you can setup a password in settings



7.2 Unlock screen

To unlock the screen, enter the unlock password or go setting to disable.

Contacting Supermicro

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